

DRAFT: Congested Interstate Corridor Report for WA State Highway System Plan

I-182 from I-82 to US395

Segment Number:

Route: I-182 BARM: 0.00 EARM: 15.19 Length: 15.19
Region: South Central County: Benton, Franklin

Number of GP Lanes		Number of HOV Lanes		Lane Width		Shoulder Width		Median Width		Posted Speed	
MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
4	6	0	0	12	12	4	10	40	76	60	70

Corridor Description:

I-182 is the primary route from I-82 into the Cities of Richland and Pasco of the Tri-Cities. The route serves the only commercial airport with scheduled air service by major carriers, and crosses the Yakima and Columbia rivers, and continues easterly as US 12 to Walla Walla. Enormous residential and commercial growth has recently occurred along this corridor in the City of Pasco.

Known Environmental Issues:

The Yakima and Columbia Rivers flow adjacent to the interstate with associated floodplains, floodways and wetlands. Some soils at the confluence of the Yakima and Columbia Rivers have a moderate to high potential for liquefaction. There are a number of public wells and sanitary control areas through the I-182 corridor.

Previously Identified Bottlenecks/Chokepoints:

The freeway segment from MP 3.94 to MP 5.67 (the interchanges of SR 240 and George Washington Way) is a distance of 1.73 miles. This short weaving distance exists between the two closely spaced interchanges. This weave consists of two on-ramp lanes adding to two highway lanes which is then followed by two lanes exiting at the next interchange - requiring that the highway reduce from four lanes back down to two. With increasing traffic volumes, this section of highway no longer functions efficiently resulting in delay and accidents.

Known Restrictions:

Studies:

Existing: (Study Name and Completion Date)

Current/Underway: (Study Name and Expected Completion Date)

Recommended: (Identify Purpose, Need, Study Limits, Estimated Time to Complete, and Approximate Cost)

HOV/HOT Lanes:

Existing:

Planned:

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Segment Number:

Programmed Projects:

Fully Funded:

PIN# 518201P I-182 Columbia River bridges joint repair (SRMP 5.83-6.27)

PIN# 518202F I-182 Road 100 I/C Paving (SRMP 6.78-7.91)

PIN# 518202H I-182 Road 100 I/C Ramp improvements (SRMP 6.78-7.91)

PIN# 518202T & 518202G I-182 Road 68 Paving and Interstate Safety (SRMP 8.36-9.95)

PIN#518202Q I-182 Pasco Vicinity - Install Median Barrier (SRMP 12.30-15.19)

Not Fully Funded:

Deficiencies:

Current

MP 3.94 to MP 5.67 - A short weaving distance exists between two closely spaced interchanges WB. This weave consists of two on ramp lanes adding to two GP lanes followed by two lanes exiting at the next interchange - reducing the highway from four lanes to two in the WB direction. MP 13.46 to MP 14.92 - The railroad overcrossing structures severely limit ramp tapers creating a bottleneck in the ramp influence area.

Future (5-10 years)

Future (15-20 years)

Concrete Data

<i>(lane miles calculated exclude bridges, other major gaps, add/drop lanes)</i>	<i>Lane Miles</i>	<i>BARM</i>	<i>EARM</i>	<i>BARM</i>	<i>EARM</i>
Number of High Priority Concrete Miles:					
Number of Medium Priority Concrete Miles:					
Number of Low Priority Concrete Miles:					

Comments:

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New Solutions:

<i>BARM</i>	<i>EARM</i>	<i>Near-term (Minimum Fix)</i>	<i>Delay Reduction</i>	<i>Accident Reduction</i>	<i>Estimated Cost</i>
<i>BARM</i>	<i>EARM</i>	<i>Mid-term (10-years) (Moderate Fix)</i>	<i>Delay Reduction</i>	<i>Accident Reduction</i>	<i>Estimated Cost</i>
2.93	6.04	six lane from Queensgate I/C to Columbia River Bridge			\$60.0 mil
<i>BARM</i>	<i>EARM</i>	<i>Long-term (15-20 years) (Maximum Fix)</i>	<i>Delay Reduction</i>	<i>Accident Reduction</i>	<i>Estimated Cost</i>

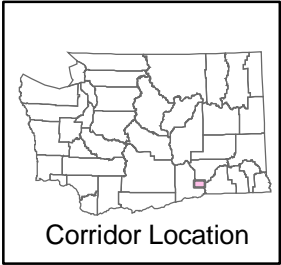
Future Corridor Vision:

Increasing density of urban development with a mix of residential, retail, commercial and industrial development.

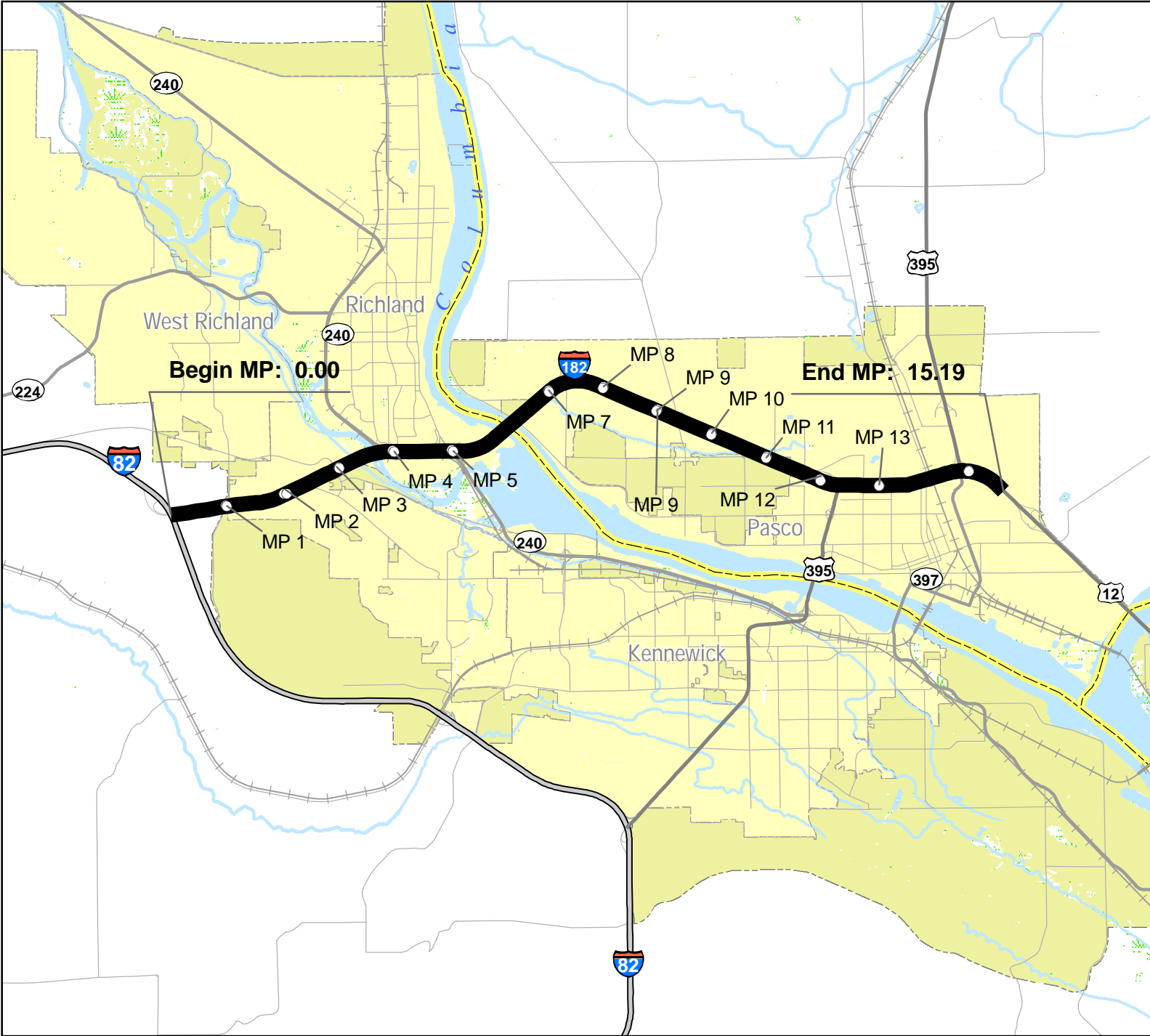
**HSP Corridor Series
Interstate**

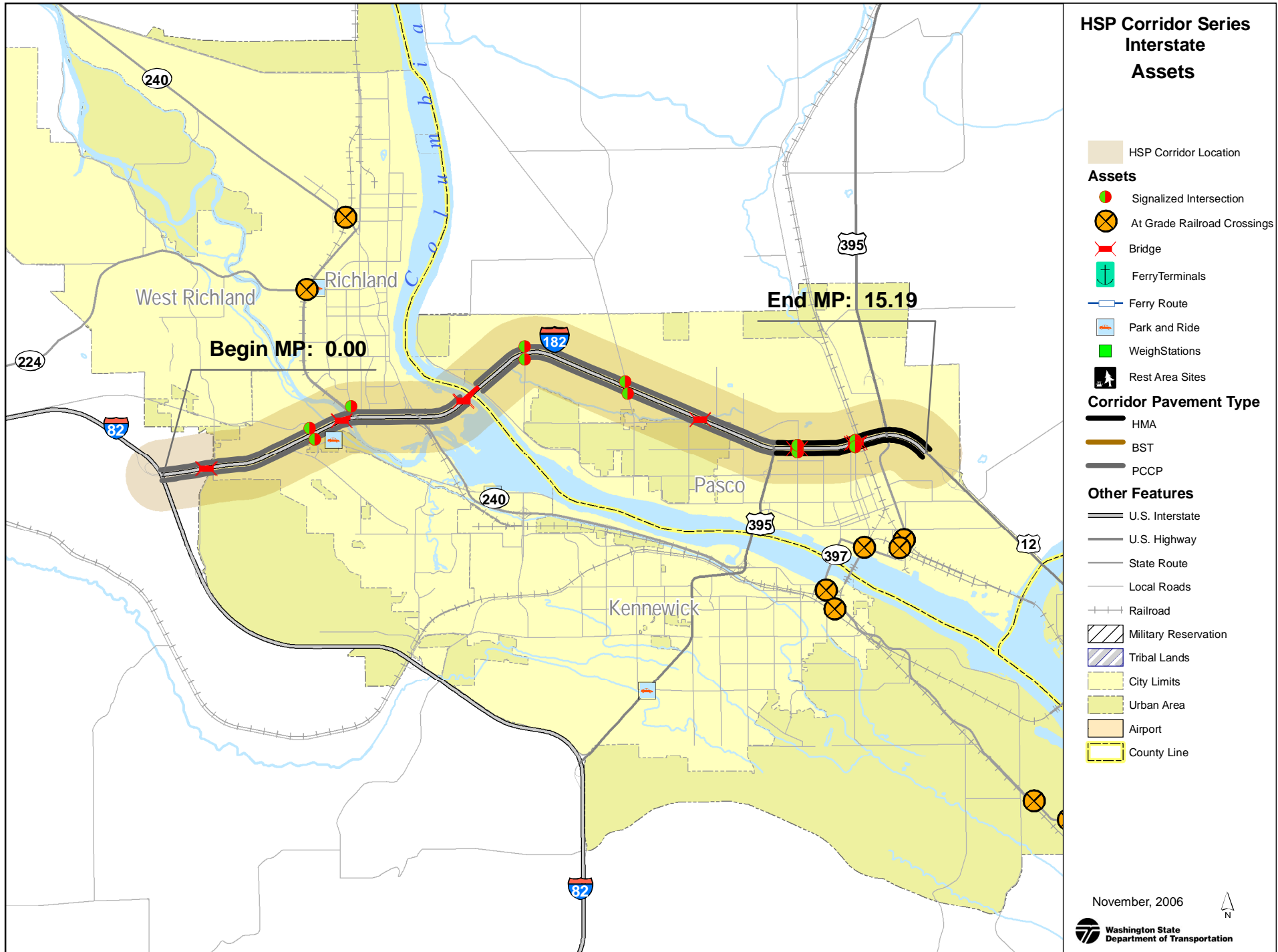
Characteristics

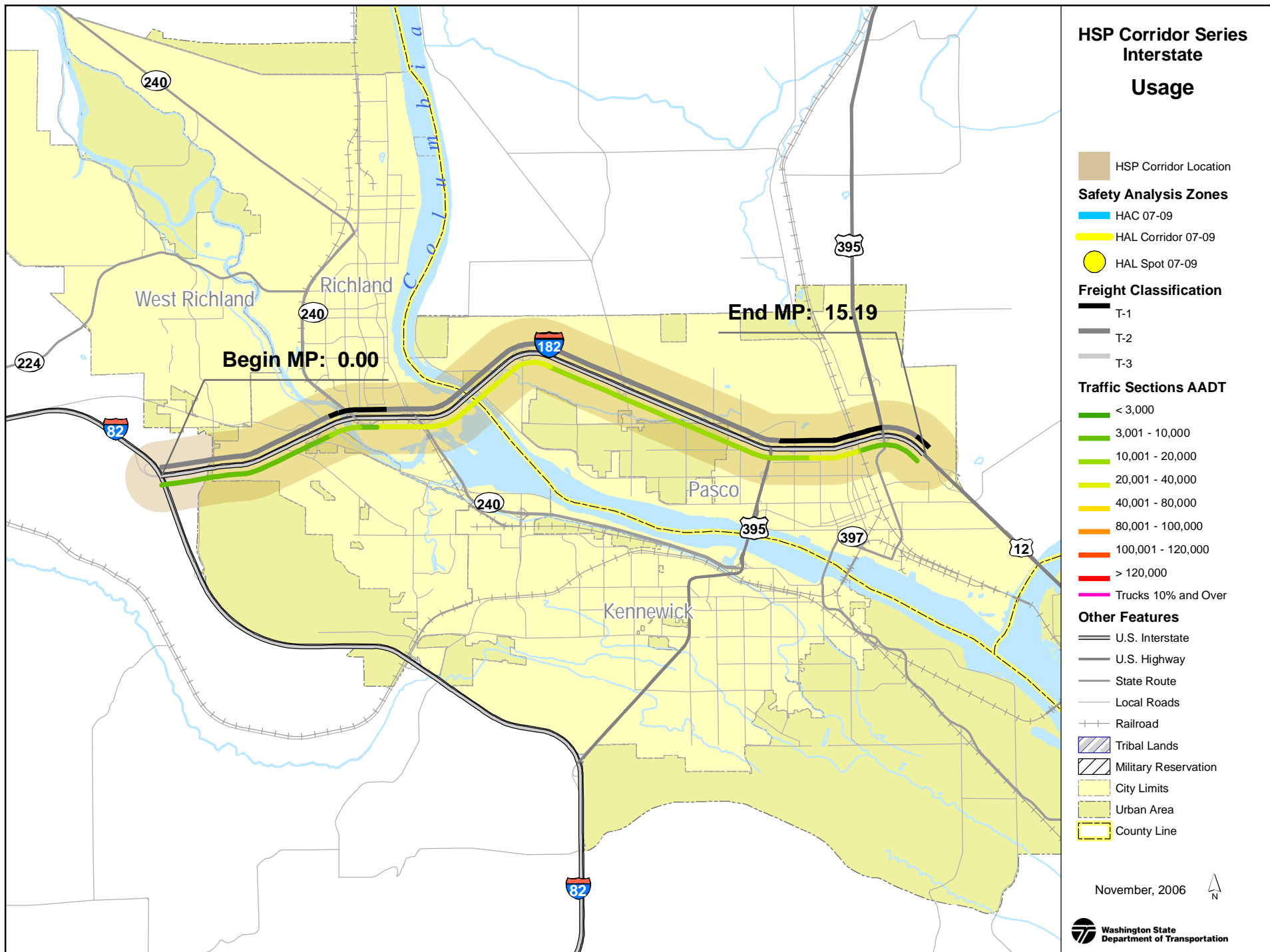
- HSP Corridor Location**
- Other Features**
- U.S. Interstate
 - U.S. Highway
 - State Route
 - Local Roads
 - Railroad
 - Wetlands
 - Tribal Lands
 - Military Reservation
 - City Limits
 - Urban Area
 - County Line

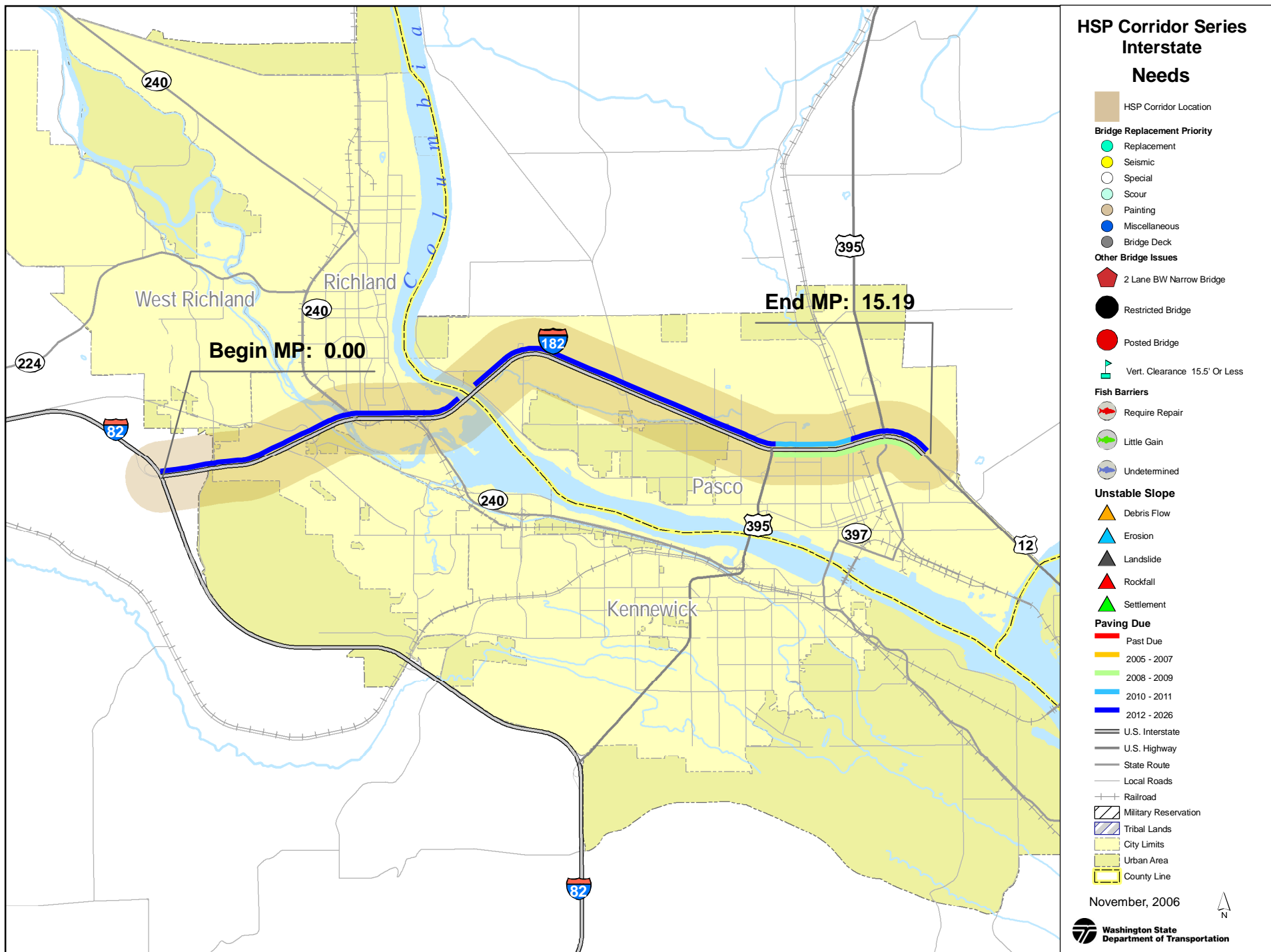


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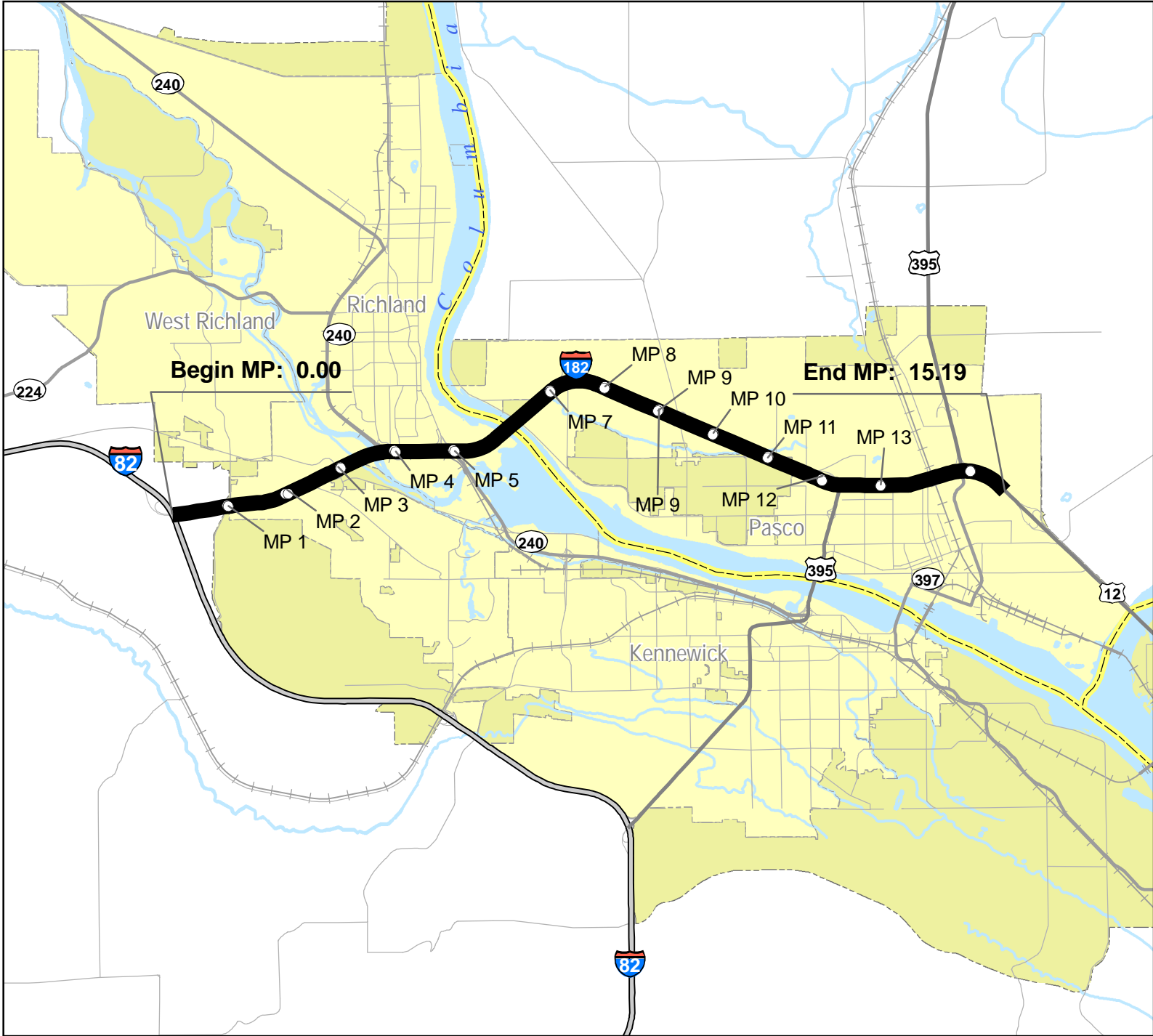
**HSP Corridor Series
Interstate
Solutions**

 HSP Corridor Location

Other Features

-  U.S. Interstate
-  U.S. Highway
-  State Route
-  Local Roads
-  Railroad
-  Tribal Lands
-  Military Reservation
-  City Limits
-  Urban Area
-  County Line

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I-82: SR 823 to US 97

Segment Number:

Route: I-82 BARM: 30.69 EARM: 38.45 Length: 7.76
Region: South Central County: Yakima

Number of GP Lanes		Number of HOV Lanes		Lane Width		Shoulder Width		Median Width		Posted Speed	
MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
4	4	0	0	12	12	4	10	40	100	60	60

Corridor Description:

I-82 passes through the Selah-Yakima-Union Gap metropolitan area. I-82 from SR 823 to US 97 parallels the Yakima River in this area. The northern end is constricted between Yakima Ridge and Lookout Point forming Selah Gap, and the confluence of the Naches and Yakima Rivers. On the south end, I-82 is constricted between Rattlesnake Hills and Ahtanum Ridge forming Union Gap, and the Yakima River.

Known Environmental Issues:

The Yakima River, and its associated floodway, floodplain, and wetlands, parallel I-82 meandering between Selah Gap and Union Gap. The floodway, floodplain, or wetlands abut I-82 in several locations through this corridor. I-82 acts as a dike protecting the densely built-up urban area from flooding. No unstable slopes in this corridor. Maintenance area for particulates and carbon monoxide. There is a confirmed or suspected contaminated site (CSCS) on Exit 33A in the vicinity of milepost 32.80 Right, milepost 33.83 Left (within 150 feet of the right-of-way).

Previously Identified Bottlenecks/Chokepoints:

US 12 eastbound to I-82 eastbound as identified in the congested corridors for state highways. Also, the interstate bridges crossing the Naches river (know as the "Twin Bridges") have substandard shoulders (1 foot) and are compounded further with both eastbound and westbound weaves.

Known Restrictions:

US 12 eastbound to I-82 eastbound as identified in the congested corridors for state highways. Also, the interstate bridges crossing the Naches river (know as the "Twin Bridges") have substandard shoulders (1 foot) and are compounded further with both eastbound and westbound weaves. including I/C and 6 laning,

Studies:

Existing: (Study Name and Completion Date)

Current/Underway: (Study Name and Expected Completion Date)

Recommended: (Identify Purpose, Need, Study Limits, Estimated Time to Complete, and Approximate Cost)

HOV/HOT Lanes:

Existing:

None.

Planned:

None.

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I-82: SR 823 to US 97

Segment Number:

Programmed Projects:

Fully Funded:

PIN #508201T: Yakima Vicinity (SRMP 31.39 - 39.14) - Install Median Barrier to Prevent Crossovers

PIN #508207T: Beech Street to Valley Mall Boulevard (SRMP 33.83 - 36.31) - Pavement Reconstruction

PIN #508202I: Terrace Heights Off Ramp (SRMP 33.26-33.51) - Install Permanent Signal & Construct Eastbound Weave Ln

PIN #508201O: Valley Mall Boulevard Interchange (SRMP 36.00 - 36.60) - Reconstruct Interchange

PIN #508201S: South Union Gap Interchange (SRMP 37.50 - 38.50) - Complete Interchange

Not Fully Funded:

PIN #508204K: Yakima Vicinity (SRMP 33.24 - 34.77) - Construct Additional Lanes

Deficiencies:

Current

same as above re: shoulders on Twin Bridges

Future (5-10 years)

capacity of I-82 will require 6 lanes

Future (15-20 years)

Concrete Data

<i>(lane miles calculated exclude bridges, other major gaps, add/drop lanes)</i>	<i>Lane Miles</i>	<i>BARM</i>	<i>EARM</i>	<i>BARM</i>	<i>EARM</i>
Number of High Priority Concrete Miles:					
Number of Medium Priority Concrete Miles:					
Number of Low Priority Concrete Miles:					

Comments:

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I-82: SR 823 to US 97

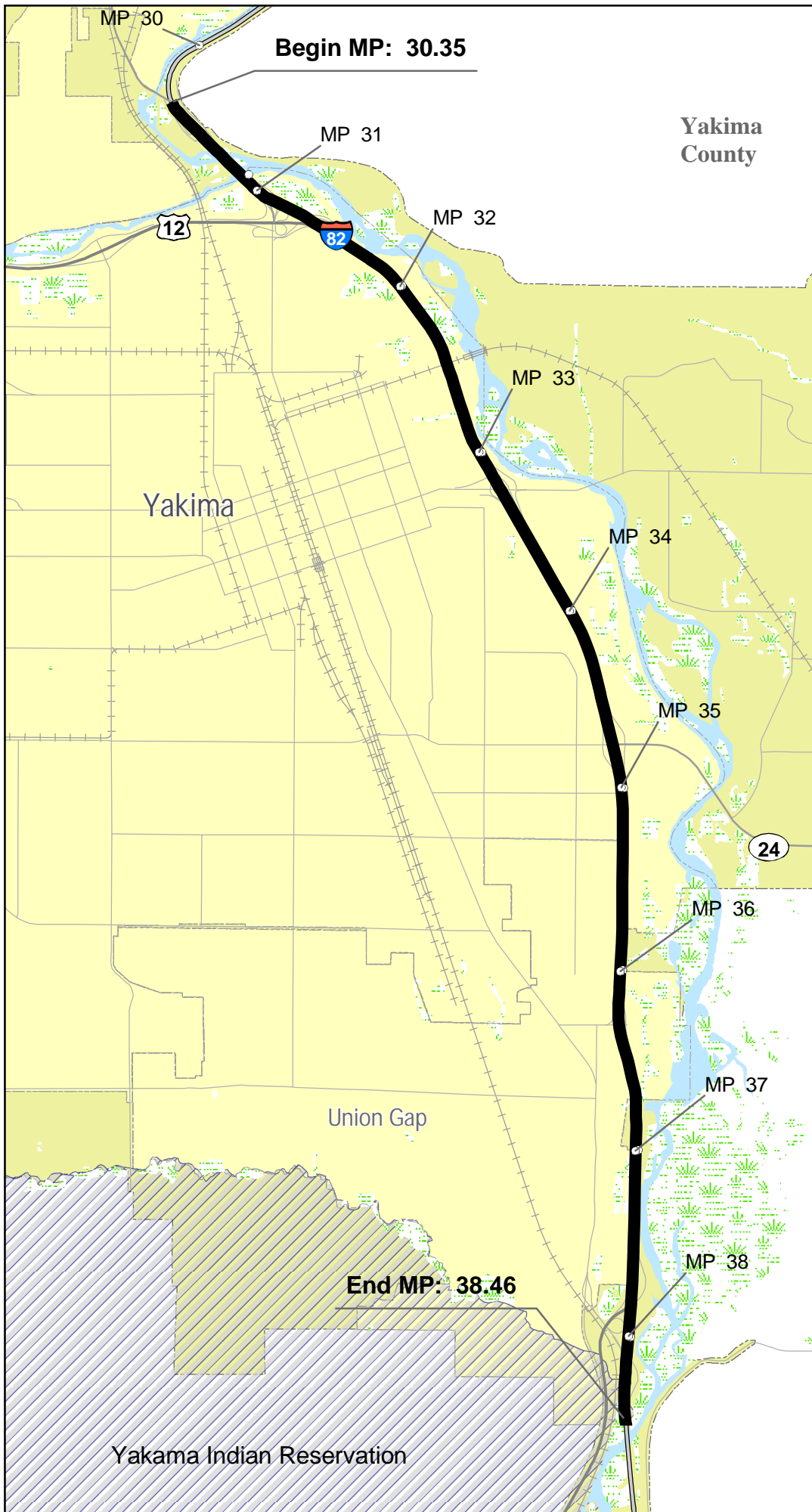
Segment Number:

New Solutions:

<i>BARM</i>	<i>EARM</i>	<i>Near-term (Minimum Fix)</i>	<i>Delay Reduction</i>	<i>Accident Reduction</i>	<i>Estimated Cost</i>
30.87	30.93	<i>Twin Bridges replacement.</i>			\$12 mil
31.35	31.75	<i>Eastbound US 12 to eastbound I-82 merge revision.</i>			\$0.85 mil
30.75	31.25	<i>Improve pedestrian and recreation access to the Naches and Yakima rivers.</i>			\$0.45 mil
37.02	38.45	<i>Protect/armor the Interstate right-of-way from Yakima River at the south end of this segment.</i>			\$1.8 mil
<i>BARM</i>	<i>EARM</i>	<i>Mid-term (10-years) (Moderate Fix)</i>	<i>Delay Reduction</i>	<i>Accident Reduction</i>	<i>Estimated Cost</i>
30.5	30.64	<i>Replace left-hand Selah exit to conventional right-hand exit.</i>			\$11.5 mil
30.35	37.62	<i>Widen I-82 to six lanes</i>			\$28.2 mil
<i>BARM</i>	<i>EARM</i>	<i>Long-term (15-20 years) (Maximum Fix)</i>	<i>Delay Reduction</i>	<i>Accident Reduction</i>	<i>Estimated Cost</i>
30.35	37.62	<i>Replace asphalt pavement with portland concrete pavement.</i>			\$65.5 mil

Future Corridor Vision:

Primary transportation corridor through Yakima urban area. Connects Yakima to I-90, Tri-Cities, and I-84. We anticipate continued development that will fully urbanizing in the general vicinity on both sides of the interstate. The Yakima River floodplain is adjacent to the east side of I-82. Dikes are being removed along the east bank of the Yakima River to allow the river to broaden into its historic floodplain.



HSP Corridor Series Interstate

Characteristics

Other Features

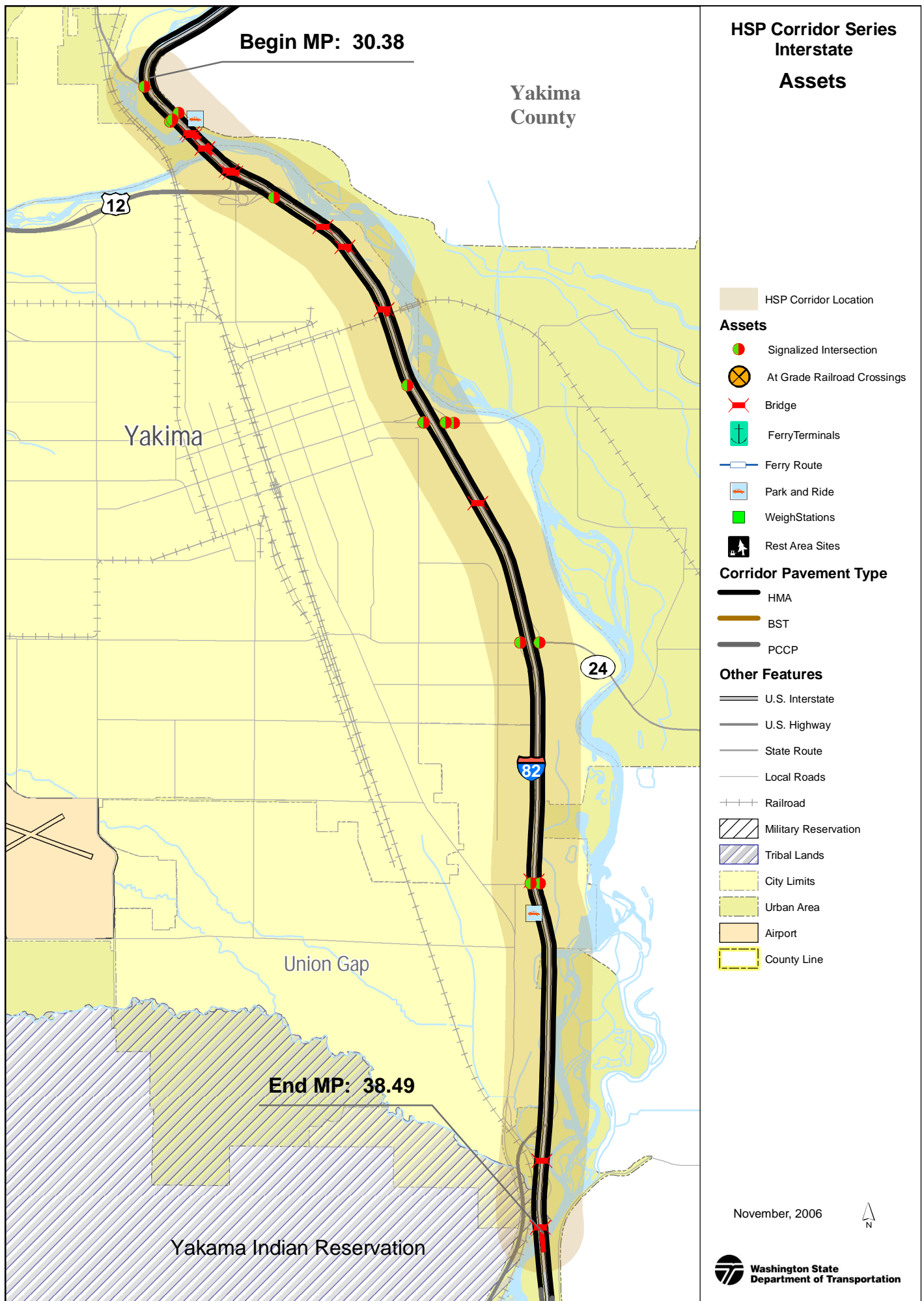
- U.S. Interstate
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- State Route
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- Railroad
- Wetlands
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- City Limits
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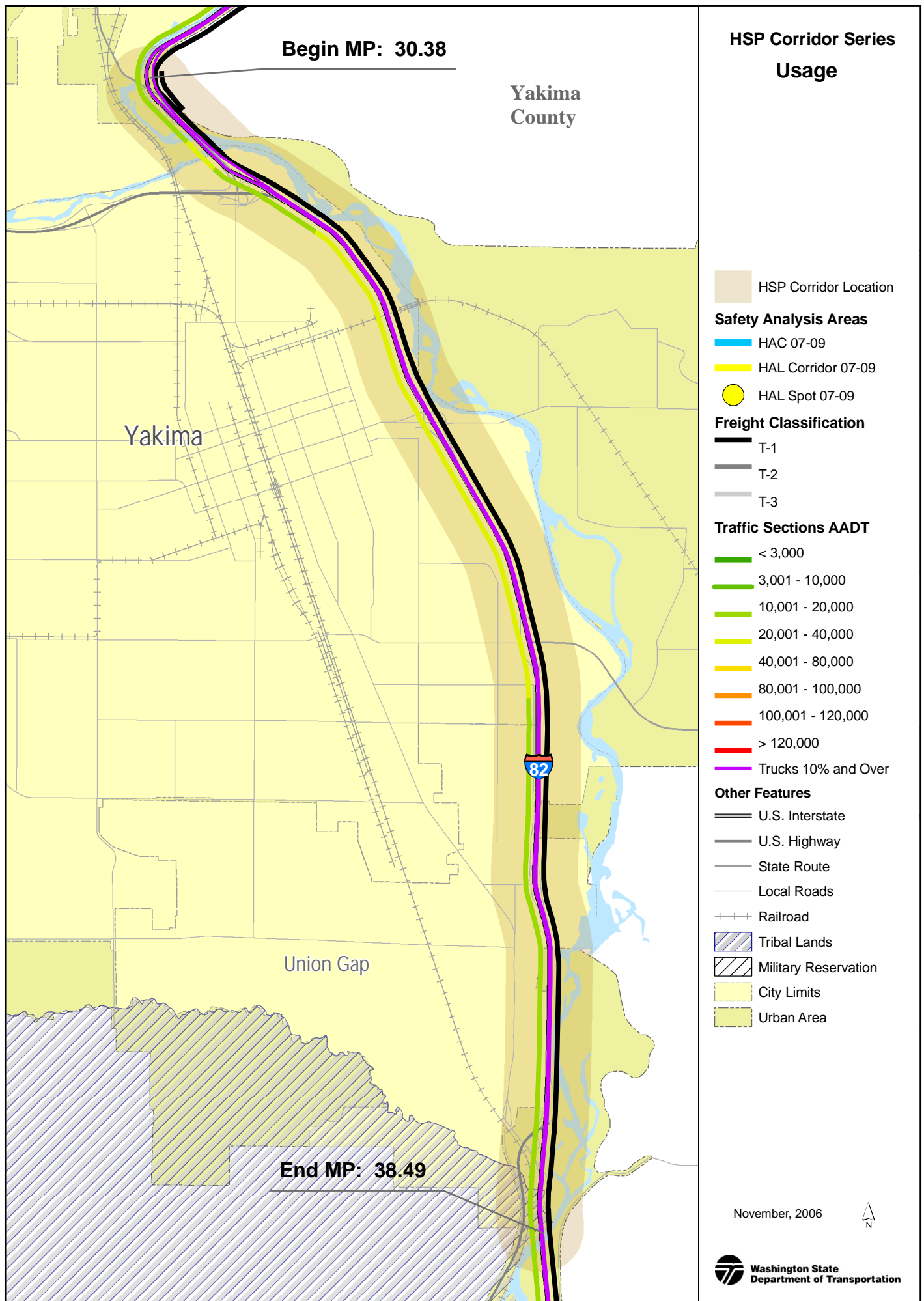


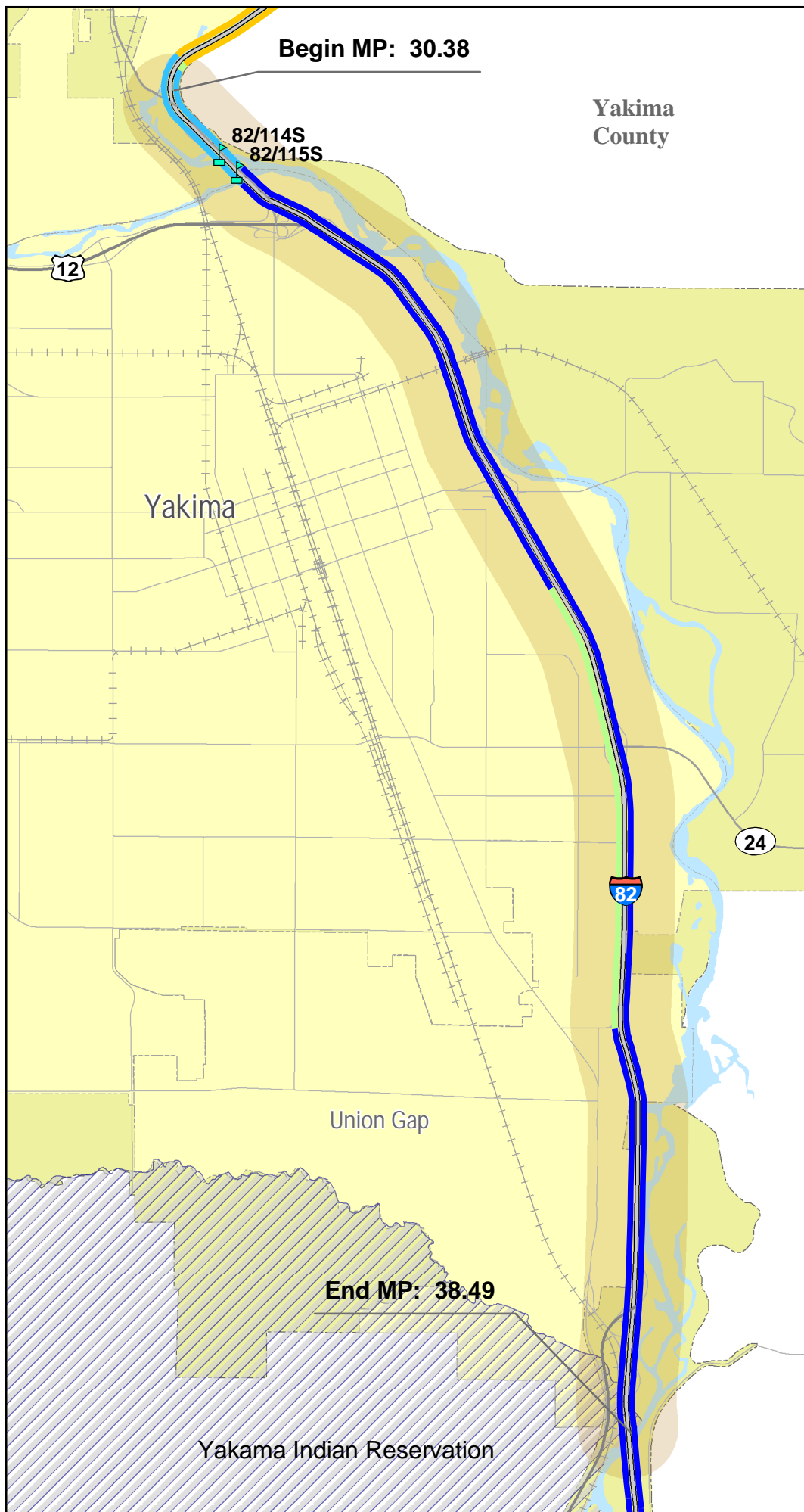
Corridor Location

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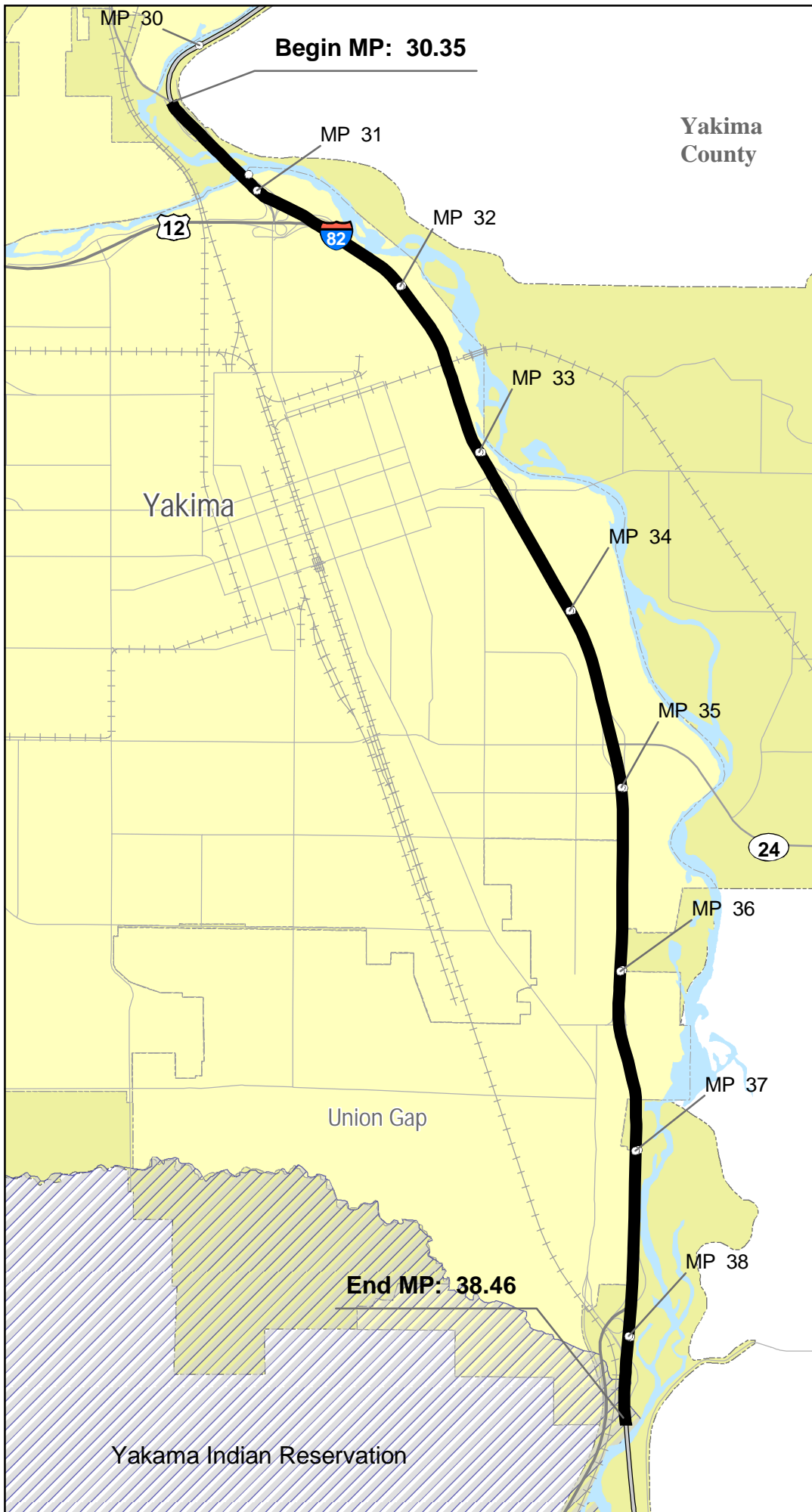


HSP Corridor Series Interstate Needs

- HSP Corridor Location
- Bridge Replacement Priority**
 - Replacement
 - Seismic
 - Special
 - Scour
 - Painting
 - Miscellaneous
 - Bridge Deck
- Other Bridge Issues**
 - 2 Lane BW Narrow Bridge
 - Restricted Bridge
 - Posted Bridge
 - Vert. Clearance 15.5' Or Less
- Fish Barriers**
 - Require Repair
 - Little Gain
 - Undetermined
- Unstable Slope**
 - Debris Flow
 - Erosion
 - Landslide
 - Rockfall
 - Settlement
- Paving Due**
 - Past Due
 - 2005 - 2007
 - 2008 - 2009
 - 2010 - 2011
 - 2012 - 2026
- U.S. Interstate
- U.S. Highway
- State Route
- Local Roads
- Railroad
- Military Reservation
- Tribal Lands
- City Limits
- Urban Area
- County Line

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HSP Corridor Series Interstate

Solutions

Other Features

- U.S. Interstate
- U.S. Highway
- State Route
- Local Roads
- Railroad
- Tribal Lands
- Military Reservation
- City Limits
- Urban Area
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Washington State
Department of Transportation

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I-90: Cabin Creek to Cle Elum/SR 970

Segment Number:

Route: I-90 BARM: 58.23 EARM: 84.47 Length: 26.24
Region: South Central County: Kittitas

Number of GP Lanes		Number of HOV Lanes		Lane Width		Shoulder Width		Median Width		Posted Speed	
MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
4	4	0	0	12	12	4	10	8	>200	65	70

Corridor Description:

Most important, most heavily traveled mountain pass. Most important and heavily used corridor for commerce. Important for access to numerous recreational areas. This segment of I-90 was constructed in 1940. The geometrics of the highway are substandard, and pavement (Portland Concrete Pavement) is experiencing serious degradation. Lake Keechelus is the headwaters to Yakima River basin, and is a critical storehouse of irrigation water for the basin. The Yakima River basin includes some of the richest and most diverse irrigated agricultural land in the world.

Known Environmental Issues:

Fish and wildlife corridor will greatly enhance connectivity for them. There are a number of locations where rockfalls have occurred, a landslide area, and an area where settlement has been an issue. The corridor abuts Keechelus Lake for about one mile. There are wetlands in the vicinity of bridges and other locations throughout the corridor: Kachess River Bridge (MP 69.50), Yakima River Bridge (MP 71.26 - 71.34), MP 73.20 vicinity, Exit 74 (West Nelson Siding Road) vicinity, Big Creek Bridge (MP 75.37), Little Creek Bridge (MP 76.60), MP 77.70 vicinity, Yakima River Bridges (MP 78.81 - 78.86), MP 79.25 vicinity, MP 79.60 vicinity, Cle Elum River Bridge (MP 80.79 - 80.85), MP 84 vicinity, and Exit 85 vicinity. The liquefaction hazard east of the Easton Hill is moderate to high. There are also several floodplains throughout the corridor. In general, other environmental concerns include weather/ESA e.g. bull trout/Alpine wilderness/Mountains-to-Sound/public wells/sanitary control areas.

Previously Identified Bottlenecks/Chokepoints:

Cabin Creek and Stampede Pass Interchanges have vertical and horizontal clearance restrictions. The segment between Franklin Falls to Stampede Pass has a series of substandard geometrics. Avalanches and related winter weather closures also occur across this same segment.

Known Restrictions:

Winter weather.

Studies:

Existing: (Study Name and Completion Date)

Current/Underway: (Study Name and Expected Completion Date)

Recommended: (Identify Purpose, Need, Study Limits, Estimated Time to Complete, and Approximate Cost)

HOV/HOT Lanes:

Existing:

None.

Planned:

None.

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I-90: Cabin Creek to Cle Elum/SR 970

Segment Number:

Programmed Projects:

Fully Funded:

PIN #509008R: Asahel Curtis to Easton(SRMP46.93-70.00)-Install Recessed Pavemnt Markings & Inset Lane/Edge Striping
PIN #509009R: Gold Creek to Easton Hill (SRMP 55.51 - 67.32) - Pavement Reconstruction
PIN #509009Q: East Easton Interchange (SRMP 71.28 - 72.03) - Pavement Reconstruction
PIN #509007T: Golf Course Road Vicinity to Easton Westbound (SRMP 72.00 - 76.00) - Replace Concrete Pavement
PIN #509007Z: Easton to Big Creek Eastbound (SRMP 72.00 - 75.00) - Replace Concrete Pavement
PIN #509005G: West Nelson Siding Interchange (SRMP 73.64 - 74.38) - Replace Illumination System
PIN #509010N: West Nelson Siding Interchange (SRMP 73.64 - 74.38) - Pavement Reconstruction
PIN #509007U: Yakima River to Golf Course Road Vicinity Westbound (SRMP 76.00 - 79.00) - Replace Concrete Pavement
PIN #509005H: Golf Course Road Interchange (SRMP 77.67 - 78.46) - Replace Illumination System
PIN #509010P: Golf Course Road Interchange (SRMP 77.67 - 78.46) - Pavement Reconstruction
PIN #509008D: Cle Elum Weigh Station Eastbound (SRMP 78.46 - 78.81) - Install Weigh in Motion
PIN #509009E: Yakima River Bridge #90/132S (SRMP 78.81 -78.85) - Deck Repair
PIN #509009U: Bullfrog Interchange (SRMP 79.69 - 80.68) - Pavement Reconstruction
PIN #509010B: Seismic Retrofit for Exit 84 (West Cle Elum Interchange) bridge #090/135E-N (SRMP 83.12 - 83.13)
PIN #509010C: Seismic Retrofit for South Cle Elum Road overcrossing #090/136S&N (SRMP 83.54 - 83.61)
PIN #509004Z: Cle Elum Vicinity: Install Cable Median Barrier (SRMP 83.61 - 84.20)

Not Fully Funded:

PIN #509007W & 509007X: Hyak to Easton (SRMP 55.00 - 72.00) - PE, Environmental & Right-of-Way for Additional Lanes

Deficiencies:

Current

deficient horizontal and vertical clearances at the Cabin Creek and Stampede Pass Interchanges.

Future (5-10 years)

capacity on I-90 requires 6 lanes

Future (15-20 years)

Concrete Data

<i>(lane miles calculated exclude bridges, other major gaps, add/drop lanes)</i>	<i>Lane Miles</i>	<i>BARM</i>	<i>EARM</i>	<i>BARM</i>	<i>EARM</i>
Number of High Priority Concrete Miles:					
Number of Medium Priority Concrete Miles:					
Number of Low Priority Concrete Miles:					

Comments:

DRAFT: Congested Interstate Corridor Report for WA State Highway System Plan

I-90: Cabin Creek to Cle Elum/SR 970

Segment Number:

New Solutions:

<i>BARM</i>	<i>EARM</i>	<i>Near-term (Minimum Fix)</i>	<i>Delay Reduction</i>	<i>Accident Reduction</i>	<i>Estimated Cost</i>
61.02	62.31	Exit 62 and 63 (Stampede Pass and Cabin Creek) interchange improvements. Reconstruct interchanges to comply with standard vertical and horizontal clearances.			\$11 mil
77.71	77.92	In conjunction with Washington State Patrol, construct eastbound "weigh-in motion" weigh station.			\$1.35 mil
<i>BARM</i>	<i>EARM</i>	<i>Mid-term (10-years) (Moderate Fix)</i>	<i>Delay Reduction</i>	<i>Accident Reduction</i>	<i>Estimated Cost</i>
58.23	69.85	Widen the interstate from 4 lanes to six lane for capacity improvement from the funded Keechelus Dam project to Exit 71.			\$435 mil
<i>BARM</i>	<i>EARM</i>	<i>Long-term (15-20 years) (Maximum Fix)</i>	<i>Delay Reduction</i>	<i>Accident Reduction</i>	<i>Estimated Cost</i>
69.85	82.49	Widen the interstate from 4 lanes to six lane for capacity improvement from Exit 71(East Easton I/C) to Exit 85 (SR970/903 I/C).			\$145 mil

Future Corridor Vision:

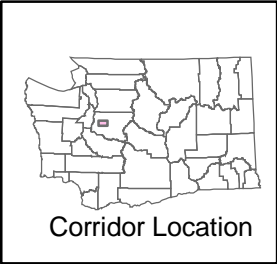
Continues to be most heavily traveled mountain pass for freight, general commerce, recreation, and general travel. Additional general purpose lane in each direction, improved horizontal curvatures, reduced closures for avalanches & avalanche control, improved wildlife connectivity, and improved safety from reduced wildlife collisions.

**HSP Corridor Series
Interstate**

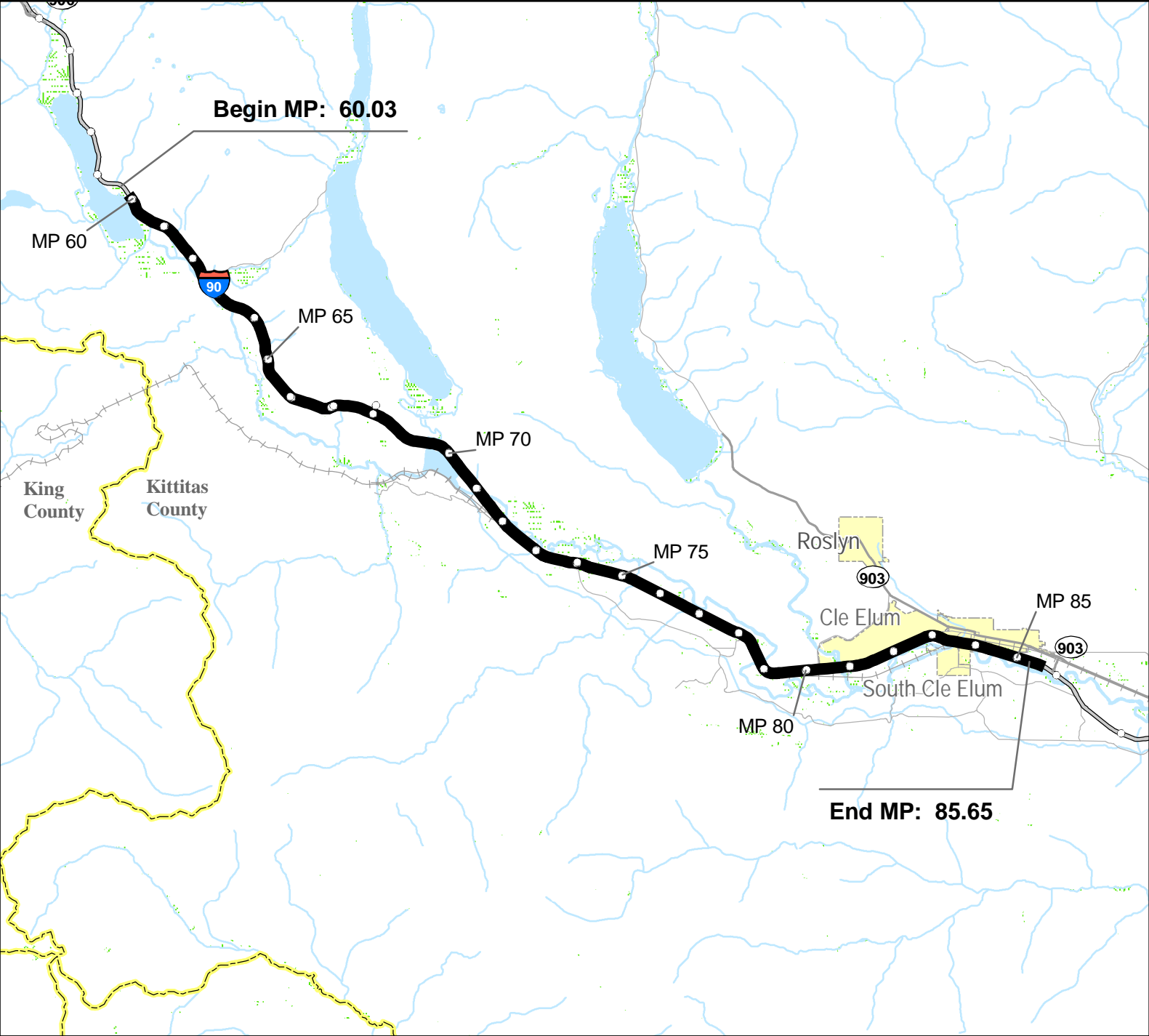
Characteristics

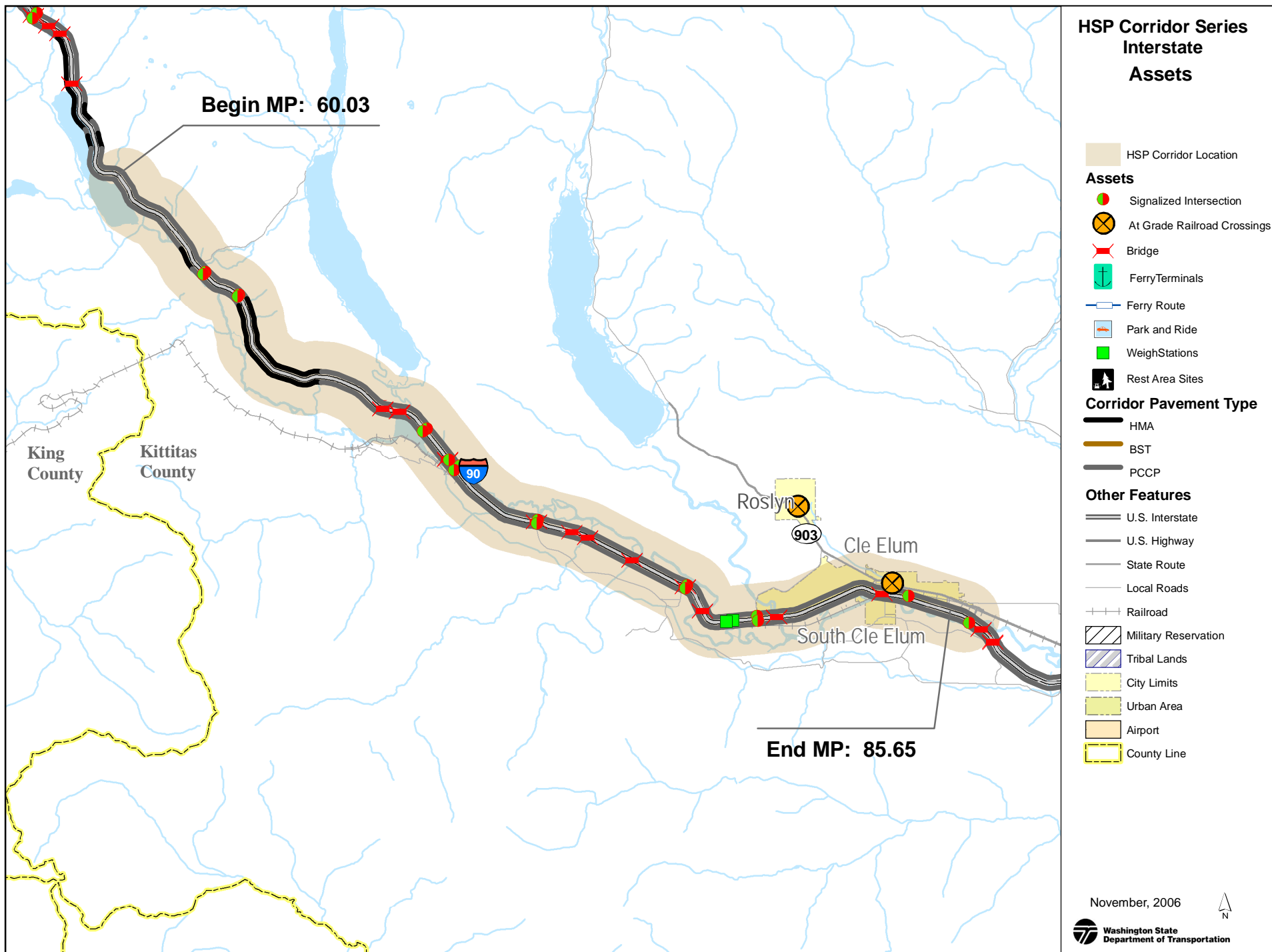
Other Features

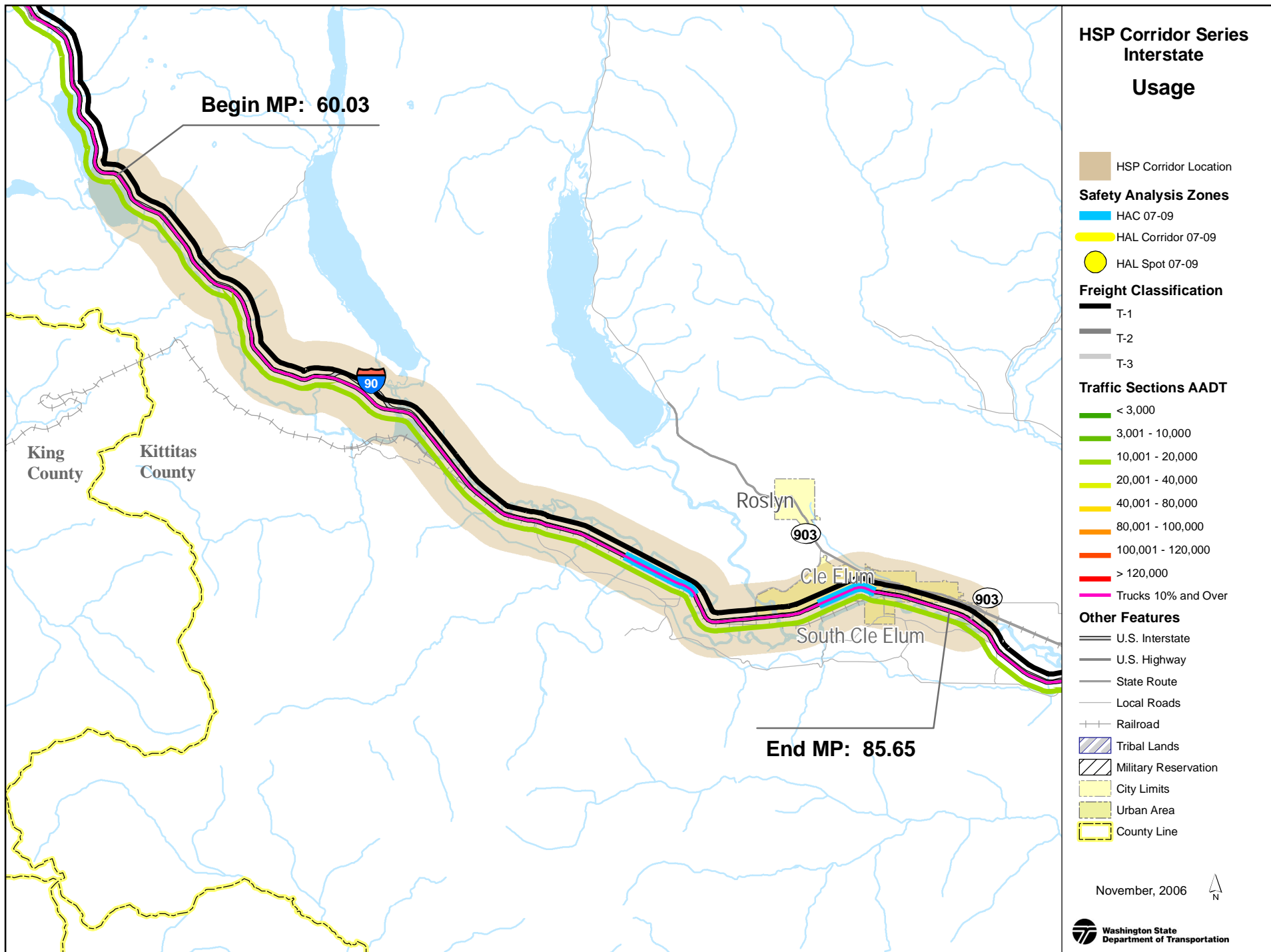
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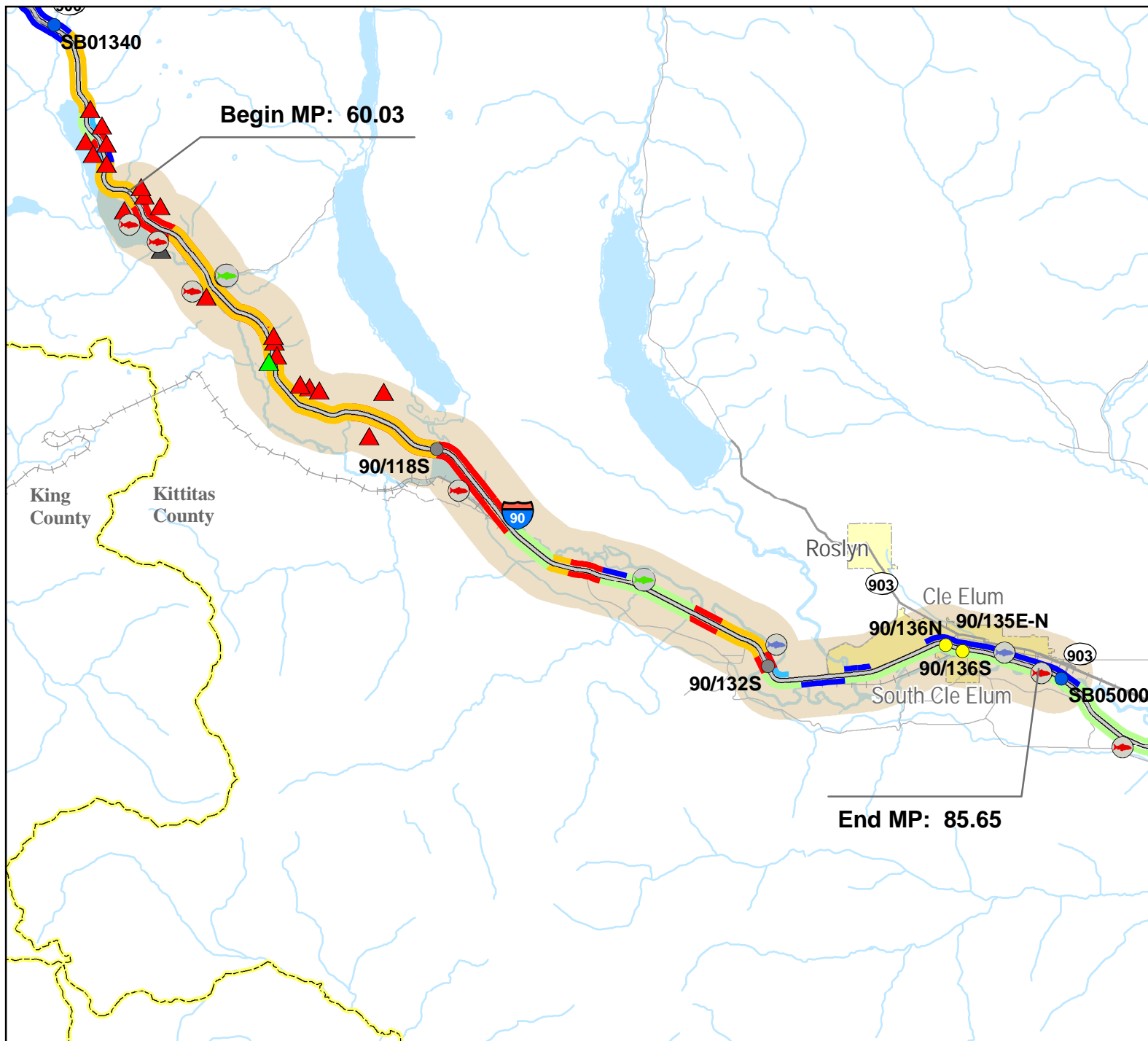


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HSP Corridor Series Interstate Needs

HSP Corridor Location

Bridge Replacement Priority

- Replacement
- Seismic
- Special
- Scour
- Painting
- Miscellaneous
- Bridge Deck

Other Bridge Issues

- 2 Lane BW Narrow Bridge
- Restricted Bridge
- Posted Bridge
- Vert. Clearance 15.5' Or Less

Fish Barriers

- Require Repair
- Little Gain
- Undetermined

Unstable Slope

- Debris Flow
- Erosion
- Landslide
- Rockfall
- Settlement

Paving Due

- Past Due
- 2005 - 2007
- 2008 - 2009
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- 2012 - 2026

U.S. Interstate

U.S. Highway

State Route

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**HSP Corridor Series
Interstate**

Solutions

Other Features

- U.S. Interstate
- U.S. Highway
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